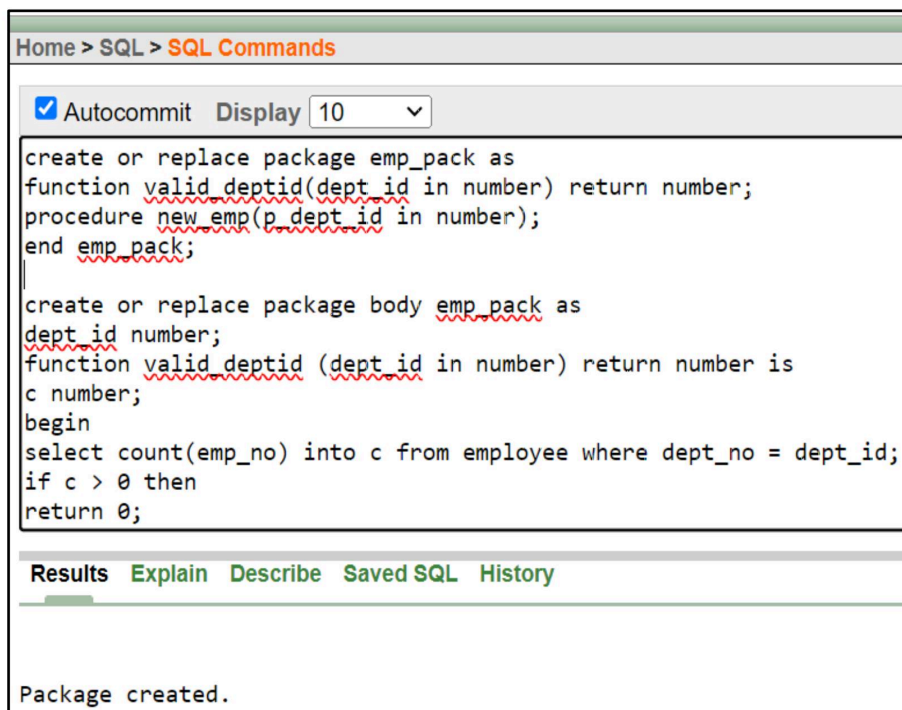


Practical 17

Aim: To perform the concept of package

1. Create a package specification and package body called EMP_PACK that contains your NEW_EMP procedure as a public construct, and your VALID_DEPTID function as a private construct. (You can save the specification and body into separate files.)
2. Invoke the NEW_EMP procedure, using 40 as a department number. Because the dept_no 40 does not exist in the DEPT table, you should get an error message as specified in the exception handler of your procedure.
3. Invoke the NEW_EMP procedure, using an existing department ID 80.

i)Query-Output:



Home > SQL > SQL Commands

☒ Autocommit Display 10

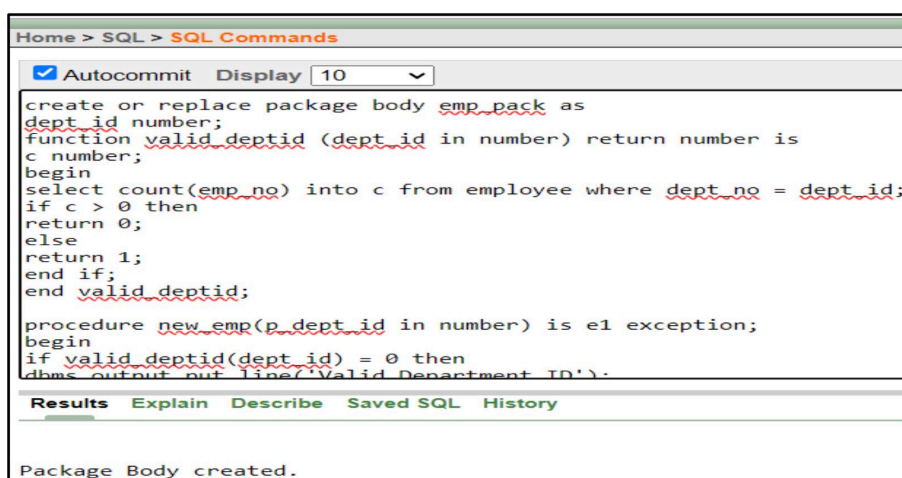
```
create or replace package emp_pack as
function valid_deptid(dept_id in number) return number;
procedure new_emp(p_dept_id in number);
end emp_pack;

create or replace package body emp_pack as
dept_id number;
function valid_deptid (dept_id in number) return number is
c number;
begin
select count(emp_no) into c from employee where dept_no = dept_id;
if c > 0 then
return 0;

```

Results Explain Describe Saved SQL History

Package created.



Home > SQL > SQL Commands

☒ Autocommit Display 10

```
create or replace package body emp_pack as
dept_id number;
function valid_deptid (dept_id in number) return number is
c number;
begin
select count(emp_no) into c from employee where dept_no = dept_id;
if c > 0 then
return 0;
else
return 1;
end if;
end valid_deptid;

procedure new_emp(p_dept_id in number) is e1 exception;
begin
if valid_deptid(dept_id) = 0 then
dbms_output.put_line('Valid Department ID');

```

Results Explain Describe Saved SQL History

Package Body created.

ii)Query-Output:

Enter Bind Variables - Google Chrome

127.0.0.1:8080/apex/f?p=4500:138:4336927876133498:::

:ENTER_DEPT_ID

Submit

Home > SQL > SQL Commands

☒ Autocommit Display 10

```

end if;

exception
when e1 then
  dbms_output.put_line('Error! Invalid Department ID');
end new_emp;
end emp_pack;

declare
v_emp_id number;
v_emp_name varchar2(50);
v_dept_id number := :Enter_dept_id;
n number;
begin
emp_pack.new_emp(v_dept_id);
end;
  
```

Results Explain Describe Saved SQL History

Error! Invalid Department ID

Statement processed.

iii)Query-Output:

Enter Bind Variables - Google Chrome

127.0.0.1:8080/apex/f?p=4500:138:3312362983213307:::

:ENTER_DEPT_ID

Submit

Home > SQL > SQL Commands

☒ Autocommit Display 10 ▼

```
dbms_output.put_line('Valid Department ID');
else
dbms_output.put_line('Invalid Department ID');
end if;

end new_emp;
end emp_pack;

declare
v_emp_id number;
v_emp_name varchar2(50);
v_dept_id number := :Enter_dept_id;
n number;
begin
emp_pack.new_emp(v_dept_id);
end;
```

Results Explain Describe Saved SQL History

Invalid Department ID
Statement processed.

Conclusion: From this practical I learned the concept of Packages in PL/SQL.

Staff Signature:

Grade:

Remarks by the Staff: